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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,649	02/14/2000	George Rome Borden IV	8371-35	6953

7590

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EXAMINER

ROUVAS, NIKOLAOS

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 03/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/503,649	Applicant(s) BORDEN IV ET AL.	
	Examiner Nikolaos Rouvas	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 12-21 is/are rejected.
- 7) ☒ Claim(s) 7-11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “visual scrolling cue” as claimed in claim 5 must be shown and appropriately referenced or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the claimed limitation “visual scrolling cue” is mentioned in two instances of the specification (page 3, line 22 and page 4, line 12). It is unclear, however, as to what applicant regards as a “visual scrolling cue”, for it is not thoroughly described in the specification.

In terms of the art rejection, “visual scrolling cue” will be interpreted to mean any type of indicator signifying that a scrolling action is taking place.

Claim Objections

Claim 8 is objected to because of the following informalities: The claim recites the limitation "program display area". It appears that applicant meant to recite --program details area--, which will be assumed as the intended claim limitation in terms of the art rejection. (In support of this assumption, see page 6, line 22 of the disclosure).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5-6, 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,850,218 to LaJoie.

In regards to claim 1, LaJoie discloses an EPG with multiple channel and time slot identifiers and program titles located in the corresponding channel and time slot identifiers. A program selection area is fixed at a predefined region of the display, and, in response to viewer requests, the program titles are scrolled, thereby changing the program in the program selection area. The aforementioned features are illustrated in Figure 16 and disclosed in column 23, line 44 – column 24, line 36.

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In regards to claim 3, LaJoie clearly discloses that the channel and time slot identifiers corresponding to the program selected are highlighted as illustrated in Figure 16, and disclosed in column 24, lines 39-47 (“channel shadow 392”, “time shadow 393”).

In regards to claim 5, LaJoie discloses “up, down, left, and right arrow indicators” (column 24, lines 37-38) further illustrated in Figure 16 as element numbers 352, 354, 356, and 358, which provide a visual indicator of the user-induced scrolling (i.e., visual scrolling cue).

In regards to claim 6, LaJoie discloses a “program summary” (column 23, lines 48-49) window that displays program information as illustrated in Figure 16. The program information corresponds to the program currently highlighted, and is thus updated whenever the user selects a different program.

In regards to claim 14, LaJoie discloses a “remote control” (column 15, line 61) with up, down, right, and left arrow keys as illustrated in Figure 15, elements 128, for issuing the corresponding commands. “Information displayed in the interactive program guide” is stored in “internal memory” (column 30, lines 35-40), and such information is inherently retrieved or stored according to instructions of a processor. “Controlling the operation of set-top terminal is Central Processing Unit” (column 13, lines 22-23), and “video control circuitry” (column 4, line 59) comprised of elements such as the ones disclosed in column 14, lines 45-57, outputs information in video-compatible format appropriate for viewing by the user. Associating a fixed program selection area with information about a specific program and responding to navigational commands so that upon scrolling the program information corresponds to the program currently in the fixed program selection area are all features that have been discussed in the rejection of

claims 1 and 6. The examiner submits that a processor being associated with performing such actions is inherent to LaJoie's invention. Therefore, the same reasons for rejection apply.

In regards to claim 15, the remote control having manually operable controls for up, down, left, and right commands was discussed in the rejection of claim 14 above. "I/R Receiver", used to receive signals from the remote control is illustrated in Figure 3, element 55. This detector is coupled to the processor via an I/O subsystem to provide indications of the remote signals.

In regards to claim 16, LaJoie discloses tuners, demodulators and decoders used to receive television signals and extract broadcast schedule information as illustrated in Figure 3 (elements 41, 42, 37, 38, etc.), and then supply this information to the processor.

In regards to claim 20, the claimed elements are illustrated in Figure 3 of LaJoie. Specifically, claimed "program schedule information manager" is met element 31, Memory Management Unit, which works in conjunction with CPU and memory to store and retrieve program schedule information; claimed "display scroll controller" is met by element 52, I/O subsystem, which receives external commands and works in conjunction with CPU to calculate an updated viewable subset of the program schedule information; and claimed "program schedule information formatter" is met by element 46, Graphics subsystem, which works in conjunction with CPU to present the program schedule information in an appropriate format.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 17, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie.

In regards to claim 2, LaJoie discloses that the “cursor does not move within grid”, but that “program cells... scroll instead” (column 24, lines 53-56). LaJoie does not disclose that the cursor (i.e. program selection area) is fixed in one dimension while allowed to move in another. However, the examiner submits that cursor movement responsive to viewer requests is widely known in the EPG art, the specifics being relative to the application. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify LaJoie to allow movement of the program selection area in one dimension of the display while restraining it from another in order to allow the viewer to get program information for a different program while maintaining the same overall appearance of the grid (i.e., keeping the same programs on the display).

In regards to claim 4, LaJoie discloses that scrolling is performed by moving the display contents instead of the cursor as discussed in the rejection of claim 1. LaJoie does not explicitly disclose that such a type of scrolling gives the appearance of fluid motion. The examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to smoothly transition between cells in order to make navigation more appealing to the viewer. U.S. Patent No. 6,177,931 to

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Alexander et al. discloses such a method for smooth scrolling, and is incorporated herein by reference. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify LaJoie to scroll the display contents in such a way that would give the appearance of fluid motion in order to make navigation more appealing to the user.

In regards to claims 17-19, LaJoie discloses the EPG system to be incorporated in set-top terminal, configured to interface with television receivers and VCRs. LaJoie does not disclose the system to be incorporated in a television tuner or receiver (however, the set-top terminals have television tuners in them), or a VCR per say. This would simply involve incorporating circuitry such as the one displayed in Figure 3 in a television receiver or a VCR. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify LaJoie to incorporate his system in a television tuner/receiver or a VCR so that the user would not have to purchase an additional apparatus (i.e., set-top terminal), thereby reducing cost.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie in view of U.S. Patent No. 6,005,601 to Ohkura et al.

In regards to claims 12 and 13, LaJoie does not disclose program titles being displayed in a manner that would make them resemble sectors of the rim of a wheel, and scrolling the program titles giving the appearance of a wheel rotation. Ohkura discloses a method and apparatus for controlling the display of an EPG. As illustrated in Figure 18 (and also in Figure 5), the EPG resembles a wheel with several bounded areas (sectors of its rim), which can be "titles of programs now being broadcast or future programs" (column 5, lines 45-46) that the user

can manipulate by rotating the wheel and make a selection. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify LaJoie with Ohkura's EPG to display program titles as sectors of a rim of a wheel and rotate the wheel to make selections in order to make navigation more appealing to the user.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie in view of U.S. Patent No. 6,426,779 to Noguchi et al.

In regards to claim 21, LaJoie does not disclose the viewable subset of program schedule information being formatted as a bitmap. Bitmaps are a well-known image format that has the advantage of being able to display much faster than other image formats, as it does not require much processor power. Noguchi discloses a process involved in "generating display information", where "character bitmaps" (column 6, lines 35-56) are extracted from a table in order to form the words desired and display the appropriate information. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify LaJoie with Noguchi to format the viewable subset of program information as a bitmap in order to allow for a faster display of program information.

Allowable Subject Matter

Claims 7-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In regards to claims 7-9, LaJoie fails to teach or imply displaying program details for multiple programs corresponding to the channel identifier and time slots of the program

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appearing in the selection region. U.S. Patent No. 6,246,442 to Harada et al. discloses an apparatus for displaying information arranged in cells. As illustrated in Figure 9, program details for programs meeting certain attributes (such as channel identifier and time slot) are displayed along a display axis. Even though the overall arrangement resembles that disclosed in the instant application, program details are not displayed in accordance with what is appearing in a selection region. Harada's system simply provides a method for determining the appearance of a guide, which is not affected by what is appearing in a selection region of the guide. Harada's system fails to teach or suggest updating a program details area according to a program appearing in a selection region, or a selection region altogether.

In regards to claims 10-11, LaJoie does not disclose displaying the program titles in bounded display areas resembling a three-dimensional stack of file tabs whose contents are displayed when the viewer manipulates the stack. U.S. Patent No. 6,522,342 to Gagnon discloses an EPG where file tabs are present, as illustrated in Figure 12. However, Gagnon's file tabs are used to aid the user in selecting different categories of actions (e.g., Messages, Schedules, Settings). The program titles are still displayed in a standard two-dimensional grid format, and there is not teaching or implication to display them as file tabs.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Nikolaos Rouvas** whose telephone number is **(703) 305-6955**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John Miller**, can be reached at **(703) 305-4795**.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.



**JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**